

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

10

Application Number

10/723,574

Filing Date

11/26/2003

First Named Inventor

Ba-Zhong Shen, Ph.D.

Art Unit

2133

Examiner Name

Albert Decady

Attorney Docket Number

BP3134

ENCLOSURES

(Check all that apply)

☐

Fee Transmittal Form

☐

Fee Attached

(via credit
card payment
form
PTO-2038)☐

Amendment/Reply

☐

After Final

☐

Affidavits/declaration(s)

☐

Extension of Time Request

☐

Express Abandonment Request

☒

Information Disclosure Statement

(including hard copies of non-U.S. patent
reference)☐Certified Copy of Priority
Document(s)☐Reply to Missing Parts/
Incomplete Application☐Reply to Missing Parts
under 37 CFR 1.52 or 1.53☐

Drawing(s)

☐

Licensing-related Papers

☐

Petition

☐Petition to Convert to a
Provisional Application☐

Power of Attorney, Revocation

☐

Change of Correspondence Address

☐

Terminal Disclaimer

☐

Request for Refund

☐

CD, Number of CD(s) _____

☐

Landscape Table on CD

☐

After Allowance Communication to TC

☐Appeal Communication to Board
of Appeals and Interferences☐Appeal Communication to TC
(Appeal Notice, Brief, Reply Brief)☐

Proprietary Information

☐

Status Letter

☒Other Enclosure(s) (please identify
below):

see remarks below

Remarks

The following are also being submitted herewith:

1. cover sheet (2 pages)
2. Cover letter from foreign associate and European Search Report (5 pages)
3. IDS forms (PTO/SB/08A, 1 sheet and PTO/SB/08B, 1 sheet)
4. hard copies of non-U.S. patent references
5. return postcard

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

Garlick Harrison & Markison, LLP (USPTO CN 34399)

Signature

/SXShort/

Printed name

Shayne X. Short, Ph.D.

Date

12/23/2004

Reg. No.

45,105

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature

Typed or printed name

Janice Ivy

Date

12/23/2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor(s): Ba-Zhong Shen,
Hau Thien Tran, and
Dr. Kelly Brian Cameron

Examiner: Albert Decady

Application Serial No: 10/723,574
Application Filing Date: 11/26/2003

Art Group: 2133
Confirmation No: 9932

Patent No: n/a

Attorney Docket No: BP3134

Patent Issue Date: n/a

Title: LDPC (Low Density Parity Check) coded modulation hybrid decoding

Date: 12/23/2004

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir or Madam:

It is requested that the enclosed reference(s) listed on the attached Information Disclosure Statement by Applicant be considered by the Examiner in connection with the above-identified patent application and be made of record therein. A European Search Report has been made for a related EP patent application. The cover letter provided by our foreign associate and the actual European Search Report are being submitted herewith in addition to copies of the reference(s) cited within the European Search Report.

Certification Under 37 C.F.R. § 1.97(e)(1)

I hereby certify that the corresponding enclosed reference(s) were cited in a European Search Report (copy enclosed) dated October 12, 2004 (10/12/2004) from the European Patent Office concerning European Patent Application No. 04009997.0 (Attorney Docket No. BP3134EP), not more than three months prior to the filing of this Information Disclosure Statement by Applicant.

Independent consideration and acknowledgment of the enclosed references is respectfully requested.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present patent application, or if the Examiner has any additional questions or concerns.

RESPECTFULLY SUBMITTED,

By: /SXShort/
Shayne X. Short, Ph.D.
Reg. No. 45,105
Direct Phone: (512) 825-1145
Direct Fax No. (512) 394-9006

GARLICK HARRISON & MARKISON LLP

ATTORNEYS AT LAW

USPTO CN 34399

P.O. Box 160727

AUSTIN, TEXAS 78716-0727

TELEPHONE (512) 825-1145 / FACSIMILE1 (512) 394-9006 / FACSIMILE2 (512) 264-3735

Substitute for form 1449/PTO

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 2

Complete if Known

Application Number	10/723,574
Filing Date	11/26/2003
First Named Inventor	Ba-Zhong Shen, Ph.D.
Art Unit	2133
Examiner Name	Albert Decady
Attorney Docket Number	BP3134

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner
Signature

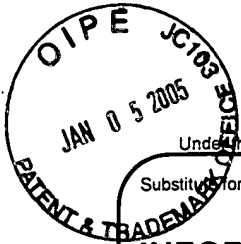
Date Considered	
-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/723,574
Filing Date	11/26/2003
First Named Inventor	Ba-Zhong Shen, Ph.D.
Art Unit	2133
Examiner Name	Albert Decady
Attorney Docket Number	BP3134

Sheet	2	of	2
-------	---	----	---

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		XIAO-YU HU; ELEFThERIOU, E.; ARNOLD, D.-M.; DHOLAKIA, A.: "Efficient Implementations of the Sum-Product Algorithm for Decoding LDPC Codes" GLOBAL TELECOMMUNICATIONS CONFERENCE, 2001. GLOBECOM '01. IEEE, vol. 2, November 29, 2001 (11/29/2001), pages 1036-1036E. XP002286249 *the whole document*	
		RAVI NARAYANASWAMI: "Coded Modulation with Low Density Parity Check Codes" June 2001 (2001-06), TEXAS UNIVERSITY, US, XP002286262, page 6-page 12; page 13-page 24	
		MITTELHOLZER T ET AL: "Reduced-complexity decoding of low density parity check codes for generalized partial response channels" IEEE TRANSACTIONS ON MAGNETICS, IEEE INC. NEW YORK, US, vol. 37, no. 2 pt1, March 2001 (2001-03), pages 721-728, XPOO2177074 ISSN: 0018-9464 *the whole document*	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.